

Page 6, line 4 through Page 7, line 4, wherein Applicant specifically recites that:

"The battery cell 11, two layers of packaging foil 21 and 22, and two layers of carrier material 24 and 25 are then passed through a laminator having a pair of heaters 28 and a pair of pressure applying means in the form of lamination rollers 29. ...The temperature, pressure and rate of travel through the laminator causes the interior surface of the packaging foils 21 and 22 to be heat sealed to the corresponding surface of the battery cell 11 facing the packaging foils. As such, the interior surface of the bottom layer of packaging foil 21 is heat sealed to the bottom surface of the substrate 13 and the interior surface of the top layer of packaging foil 22 is heat sealed to the top surface of passivation layer 19, as shown in Fig. 2. Although within the scope of the present invention many different combinations of temperature, pressure and material travel speeds through the laminator may be discovered which heat seals the packaging layers to the battery cell. However, it has been discovered that a temperature of 155 degrees Celsius, a pressure of 5 p.s.i. and a travel speed of 25 cm/min for a Class PPD

packaging material produces a proper heat seal between the packaging foils and the battery cell."

Applicant also points out the specification specifically points out the benefit of heat sealing on Page 7, lines 4-27, which inherently point out what is not intended to be meant by heat sealing through examples of the prior art. The specification therein recite the following:

"It has been discovered that by heat sealing the packaging foils directly to the battery cell the battery cell is provided with a substantially improved protective layer thereby improving the overall packaged battery. This improvement is achieved in part by the lamination process wherein as the packaging foils are heat sealed to the battery cell and as such occurs the gases between the foils and the battery cell are driven out. The use of packaging materials with the prior art batteries produced spaces between the battery cell and the packaging material, thereby allowing the capture of gases within these spaces which could degrade the components of the battery cell. The process of laminating the packaging material directly to the battery cell also creates a smaller overall battery..."

The Applicant's specification further recite on Page 8, lines 1-8,

"It should be understood that while the present invention strives to laminate the exterior surface of the battery cell completely with the packaging material, the invention is not limited to such. However, it is desirous to laminate at least a majority of the top surface of the battery cell, the active material surface, so as to be in sealing engagement with the packaging foil."

As such, it is clear that the meaning of heat sealing is the same of lamination, wherein the majority of the surfaces are in sealing engagement with each other, not merely a peripheral edge as suggested by the examiner.

The examiner also submits that Applicant's term does not describe whether this is a "spot" heat seal or not. Applicant respectfully submits that the specifications description of sealing a **majority** of the surface clearly indicates that this is not a spot weld but that it encompasses a broad surface of bonding engagement between layers.

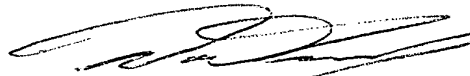
Lastly, the examiner contends that the Applicant's heat sealing step does not specifically require it to be directly heat sealed to the top surface and the bottom surface. This contention is incorrect as Applicant's claim 1 clearly states that "(c) heat sealing the first layer of packaging foil to the top surface of the battery cell, heat sealing the second layer of packaging foil to the bottom surface of the battery cell". Applicant's claim 1 also distinguishes this heat sealing from the peripheral edge heat sealing by reciting that in addition to the first two heat sealing steps a third heat sealing step is required wherein "heat sealing the first layer of packaging foil to the second layer of packaging foil about the periphery of the battery cell." It is only this last step that is shown by the cited reference of Xing et al.

Next with regard to the use of the term in connection with the Xing et al. reference, Applicant submits that the term heat seal is disclosed in Xing et al. However, the heat seal only applies to the bond or seal created between the top and bottom layers along their periphery. Furthermore, as clearly illustrated by Applicant in describing the prior art and as clearly shown by Xing et al. the term does not apply to areas that are not bonded together through the heating process. It should be noted that simply placing an item "in contact" with another and applying heat to a different area does not constitute heat sealing, as suggested by the examiner.

If the examiner's contentions regarding heat sealing are upheld, it is respectfully submitted that such still does not show the three different heat seals recited in claim 1, as Xing et al. only discloses the third heat seal about the periphery.

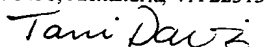
In conclusion, Applicant submits that the heat sealing process is clearly defined in Applicant's specification and that this term is not encompassed by the Xing et al. reference.

Respectfully submitted,



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